

## **Appendix T**

# **Automated Information Systems (AIS) Operational Requirements Documents (ORDs) Recommendations**

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## T.1 AIS ORDs Recommendations

**NOTE: For AIS, the ORD represents a formatted statement addressing the operational effectiveness and suitability performance requirements and parameters for an identified AIS. The following guidance for AIS applies. [Always use the verb “*shall*” in a statement that indicates an operational requirement.]**

1. **General Description of Operational Capability.** The general description of operational capability pertains to the mission area as it relates to the proposed AIS, and anticipated operational and support concepts for program and logistics support planning.
  - a. **Mission Area.** The mission area pertains to associating the need with the major planning objective found in the Defense Planning Guidance document. Address the following information in this paragraph.
    - ★ **Identify** the major program planning objective or Defense Planning Guidance section addressed by the need.
    - ★ **Reference** DoD or Military Department long range investment plans, where applicable.
    - ★ **Identify** for top-down directed needs who and what drove the requirement.
  - b. **Mission Area Need.** Mission area need pertains to identifying and describing the required assigned tasks for achieving mission needs to support the national strategy. Managers plan, organize, direct, and control the performance of assigned tasks to achieve mission objectives. To perform these management processes, managers require information to make decisions that ultimately direct the effective use of personnel and resources to support the national strategy. Managers use management information systems (MIS) — automated, semi-automated, or manual information systems — as a means of generating information that managers need. The effectiveness of an MIS to achieve assigned tasks depends largely on the capability of the MIS to provide quality information in a timely, usable, and reliable manner. Address the following information in this paragraph.
    - ★ **Identify** the overall MIS mission need (objective) and operational task(s).
    - ★ **Describe** the deficiency(ies) to meeting the MIS mission need and operational task(s).
    - ★ **Comment** on the timing for achieving the mission need relative to other needs in the mission area.
    - ★ **Comment** on the priority of the need relative to other needs in the mission area.
- (1) **Planning Task Needs.** Planning task needs pertain to setting goals and defining policies, procedures, and programs to achieve mission objectives. The three types of planning activities include strategic planning, tactical planning, and forecasting. Strategic planning tasks involve determining organization objectives and formulating long term organizational policy to meet mission needs. Tactical planning tasks involve the allocation of total resources of the organization to meet mission needs. Forecasting tasks involve determining or predicting possible outcomes of proposed strategic and tactical plans. Planning describes and explores the external operational environment with regard to the mission of the organization. Address the following information in this paragraph.
  - ★ **Identify** the planning tasks performed by managers to support the mission need.
  - ★ **Describe** current MIS deficiency(ies) to perform effectively planning assigned tasks.
  - ★ **Define** MIS requirement(s) to perform effectively planning assigned tasks.

- (2) **Organizing Task Needs.** Organizing task needs pertain to grouping activities to be performed as well as establishing organizational forms and relationships to meet mission needs. The two types of organization activities include personnel organization and resource organization. Personnel organization tasks involve the selection and training of organization personnel, and the allocation of duties and workloads to personnel in a logical manner to meet mission needs. Resource organization tasks involve the use of logical methods to categorize and arrange necessary resources to meet mission needs. Organizing describes and explores the internal operations of the organization with regard to the mission of the organization and the external operational environment. Address the following information in this paragraph.
      - ★ **Identify** the organizing tasks performed by managers to support the mission need.
      - ★ **Describe** current MIS deficiency(ies) to perform effectively organizing tasks.
      - ★ **Define** MIS requirement(s) to perform effectively organizing assigned tasks.
    - (3) **Directing Task Needs.** Directing task needs pertain to leading, guiding, and motivating people in the organization through information facilitation and flow of knowledge to achieve mission needs. The three types of directing activities include leadership, communication, and coordination. Leadership directing tasks involve the ability to provide effective guidance that motivates personnel to meet mission needs. Communication directing tasks involve the psychology, language structure, and physical communication paths used to convey information to meet mission needs. Coordination directing tasks involve the integration of specific departments or divisions within the organization to meet mission needs. Directing communicates decisions for executing the internal operations of the organization with regard to the mission of the organization and the external operational environment. Address the following information in this paragraph.
      - ★ **Identify** the directing tasks performed by managers to support the mission need.
      - ★ **Describe** current MIS deficiency(ies) to perform effectively directing tasks.
      - ★ **Define** MIS requirement(s) to perform effectively directing assigned tasks.
    - (4) **Controlling Task Needs.** Controlling task needs pertain to monitoring, measuring, and modifying (where necessary) policy, procedures, and programs to achieve mission needs. The three types of controlling activities include monitoring activities, measuring planned performance, and modifying activities. Monitored activities controlling tasks involve the supervising of actual activities to meet mission needs. Measuring planned performance controlling tasks involve the comparison of planned performance with actual performance to meet mission needs. Modified activities controlling tasks involve the alteration of actual activities to meet mission needs. Controlling ensures the internal operations of the organization support the mission of the organization in the external operational environment. Address the following information in this paragraph.
      - ★ **Identify** the controlling tasks performed by managers to support the mission need.
      - ★ **Describe** current MIS deficiency(ies) to perform effectively controlling tasks.
      - ★ **Define** MIS requirement(s) to perform effectively controlling assigned tasks.
  - c. **Joint Potential and Multinational Applicability.** Joint potential and multinational applicability pertains to AIS capability for joint Service or multinational use. Address the following information in this paragraph.
    - ★ **Identify** any joint Service or multinational applications for the AIS.
2. **Threat.** The threat pertains to identifying and describing the encountered threat environment for achieving mission needs to support the national strategy. In the threat environment, MIS not only can engage threats, but also are vulnerable to threats.

- a. **Threat Engagement.** Threat engagement pertains to the threat environment that must be countered to achieve mission needs. Most MIS are not designed to encounter threats. Normally, this subparagraph would be addressed as “*not applicable*.” If an MIS counters threats, address the following information in this paragraph
    - ★ **State** the Defense Intelligence Agency (DIA)-validated threat encountered by MIS.
    - ★ **Discuss** the projected threat environment to be countered by MIS.
    - ★ **Discuss** the shortfalls of existing MIS capabilities or systems in meeting these threats.
  - b. **Threat Vulnerability.** Threat vulnerability pertains to the threat environment that endangers an MIS survivability. Most MIS are susceptible to a variety of threats which cover accidental and deliberate threats. These threats engage information of the MIS. Address the following information in this paragraph.
    - ★ **Discuss** the threat of accidental modification, destruction, or disclosure of information used for decision making by managers.
    - ★ **Discuss** the threat of deliberate modification, destruction, or disclosure of information used for decision making by managers.
3. **Shortcomings of Existing Systems.** Shortcomings of existing systems pertain to the shortfalls of the status quo system and considered non material alternatives for achieving mission needs to support the national strategy. These options include the status quo, modifying doctrine, modifying operational concepts, modifying tactics, modifying the organization, and modifying training.
    - a. **Status Quo.** The status quo pertains to the MIS (automated, semi-automated, or manual information system) currently employed by the organization to manage information to support mission needs. Address the following information in this paragraph.
      - ★ **Discuss** the results of the mission need considerations.
      - ★ **Identify** the status quo with regard to MIS.
      - ★ **Describe** why the status quo with regard to MIS was judged to be inadequate.
    - b. **Modify Doctrine Option.** The modify doctrine option pertains to changing current US or Allied doctrine to achieve mission needs. Address the following information in this paragraph.
      - ★ **Identify** any changes in US or allied doctrine considered as a non material alternative solution to meet the mission need.
      - ★ **Describe** why such changes in doctrine were judged as inadequate to meet the mission need.
    - c. **Modify Operational Concept Option.** The modify operational concept option pertains to changing the current MIS operational concepts or maintenance concepts to achieve mission needs. Address the following information in this paragraph.
      - ★ **Identify** any changes in operational concepts considered as a non material alternative solution to meet the mission need.
      - ★ **Describe** why such changes in operational concepts were judged as inadequate to meet the mission need.
    - d. **Modify Tactics Option.** The modify tactics option pertains to changing current tactics to achieve mission needs. Address the following information in this paragraph.
      - ★ **Identify** any changes in tactics considered as a non material alternative solution to meet the mission need.
      - ★ **Describe** why changes in tactics were judged inadequate to meet the mission need.

- e. **Modify Organization Option.** The modify organization option pertains to changing current organizational structure to achieve mission needs. Address the following information in this paragraph.
    - ★ **Identify** any changes in organizational structure considered as a non material alternative solution to meet the mission need.
    - ★ **Describe** why such changes in organizational structure were judged as inadequate to meet the mission need.
  - f. **Modify Training Option.** The modify training option pertains to changing current training methods to achieve mission needs. Address the following information in this paragraph.
    - ★ **Identify** any changes in training considered as a non material alternative solution to meet the mission need.
    - ★ **Describe** why such changes in training methods were judged as inadequate to meet the mission need.
4. **Capabilities Required.** Capabilities required pertain to the operational effectiveness and operational suitability performance of the AIS to achieve mission needs. AIS required capabilities address the critical operational issues (COIs), measures of effectiveness (MOEs), measures of performance (MOPs), and thresholds and/or objectives. COIs represent key operational effectiveness and suitability issues — as deemed by the user — that must be examined during operational test to determine the system’s capability to meet mission needs. MOEs represent quantitative measurements of a system’s degree of performance for specific operational/assigned tasks. MOPs represent quantitative and qualitative measurements of system capabilities and characteristics to perform assigned tasks to achieve mission needs. Threshold values represent the minimum acceptable operational requirements. Objective values represent the desired, beneficial increase operational requirement. Address the following information in this paragraph, replacing terms underlined with appropriate system terminology.
- ★ **State the following:** “*These capabilities address the required operational effectiveness and operational suitability performance capabilities and characteristics of the AIS to meet mission need(s).*”
  - a. **System Performance.** System performance pertains to the operational effectiveness COIs, MOEs, MOPs, and thresholds/objectives with regard to assigned task scenarios. Address the following information in this paragraph, replacing terms underlined with appropriate system terminology.
    - ★ **State the following:** “*Figure T-1 diagrams the macro-managerial tasks both sequentially and concurrently. System performance addresses the operational effectiveness critical operational issues (COIs), measures of effectiveness (MOEs), measures of performance (MOPs), and associated thresholds/ objectives with regard to assigned task scenarios.*”
    - ★ **Diagram** sequentially and concurrently in a PERT flow chart those macro-managerial tasks that the AIS will support.

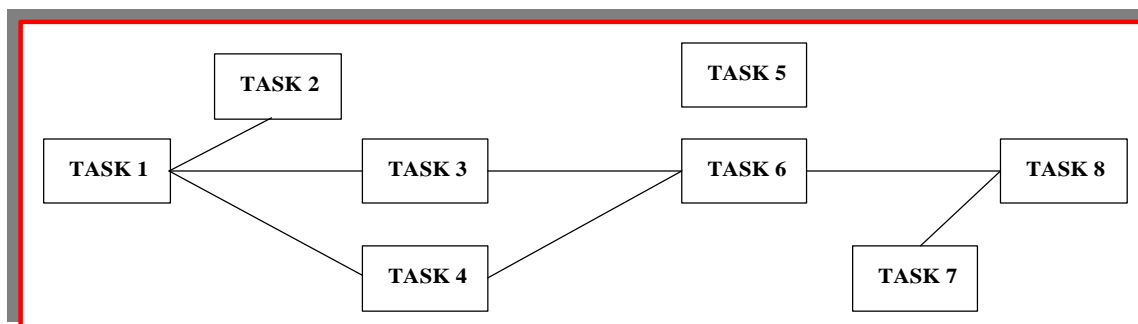


Figure T-1. Macro-Managerial Task Flow Chart

- (1) **Effectiveness COIs.** Operational effectiveness represents the overall degree of mission accomplishment of a system when used by representative personnel in the environment planned for employment of the system considering organization, doctrine, tactics, survivability, vulnerability, and threat. The term “*mission*” refers to the task, together with the purpose, that clearly indicates the action to be taken and the reason therefore. In common usage, especially when applied to lower military units, the mission is a duty assigned to an individual or unit; a task. Within this context, MIS operational effectiveness evaluation focuses on examining the operational concept (assigned tasks) performed by users using the MIS to meet mission needs that accomplish operational task(s). As the OT&E test article, the AIS represents a system designed to provide managers useful information in a necessary time frame to make decisions. As a tool for management, an AIS must enable users to perform assigned tasks (planning, organizing, directing, and controlling actions) to manage effectively the assets (personnel and resources) necessary to accomplish the operational tasks of the organization in support of some operational objective and strategy.

★ **State the following:** “*The operational effectiveness COIs are derived from the type of task scenarios the user must perform with the AIS to meet mission needs.*”

As subparagraphs to this paragraph heading, effectiveness COIs are written in one of two ways. The first method focuses on the functional operation areas (i.e., logistics support, transportation, Intelligence, weather, etc..) to manage the missions. Semantically, this type of effectiveness COI specifies the AIS; the functional operation area of the organization employing the AIS; the operational locations for employing the AIS; the operational task (management); and the mission being managed. To address this type of COI, the functional area assigned tasks (plan, organize, direct, and control) become the focus of the evaluation. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.

★ **State the following:** “*Figure T-2 diagrams the functional area managerial tasks both sequentially and concurrently. The following subparagraphs address the functional operation area scenarios required to answer the COI: Do AIS capabilities support functional operational area decision makers at operating locations to manage the mission.*”

★ **Diagram** sequentially and concurrently in a PERT flow chart those functional area tasks that the AIS will support.

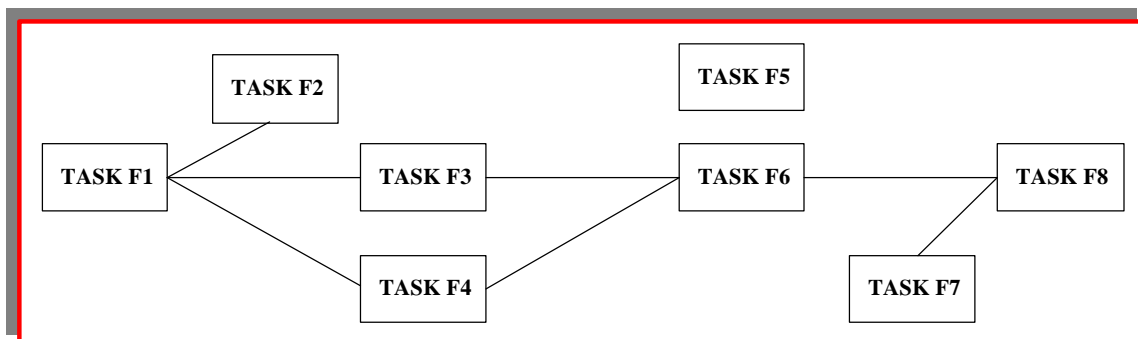


Figure T-2. Functional Area Task Flow Chart

★ **Specify** the following for each functional operation area task scenario subparagraph:

- In “*bold*” face, the assigned task to be performed.
- Who performs the assigned task (user types, functional area, etc.).
- What do users do to perform the assigned task (major steps, subtasks, etc.).
- When do users begin/conclude the assigned task (input event, output event, etc.).
- Where do users perform the assigned task (location, managerial level, etc.).
- Why do users require an AIS to perform the assigned task effectively.
- How often do users perform the assigned task (frequency, workload, etc.).
- Effectiveness (task success rate) threshold and objective requirements.
- Performance (information value attributes) threshold and objective requirements.
- Associated rationale for quantified thresholds and objectives metrics.
- The AIS acquisition increment(s) whose capabilities address the assigned task.

The second method focuses on the assigned task areas (plan, organize, direct, and control) to manage the mission. Semantically, effectiveness COIs specify the AIS, the organization employing the AIS, the operational locations for employing the AIS, the assigned task (plan, organize, direct, and control), and the mission being managed. As described in the subsequent paragraphs, four assigned task area COIs exist and they collectively enable the accomplishment of the operational task (management).

- (a) **Planning Task Scenarios.** Planning task scenarios pertain to those assigned tasks that are concerned with setting goals and defining policies, procedures, and programs to achieve mission needs. The planning task scenarios address the principle COI: “Do AIS capabilities support organization decision makers at operational locations to plan the mission.” The “*planning the mission*” assigned tasks associated with this COI address the required functional users and their assigned tasks to plan for the use of their forces and resources to support the operational objectives of the organization. The planning task MOEs cover information value. Users specify whether planning tasks warrant a COI. Address the following information in this paragraph, replacing terms underlined with system terminology.
- ★ **State the following:** “*Figure T-3 diagrams the planning managerial tasks both sequentially and concurrently. The following subparagraphs address the planning task scenarios required to answer the COI: Do AIS capabilities support organization decision makers at operating locations to plan the mission.*”
  - ★ **Diagram** sequentially and concurrently in a PERT flow chart those planning managerial tasks that the AIS will support.

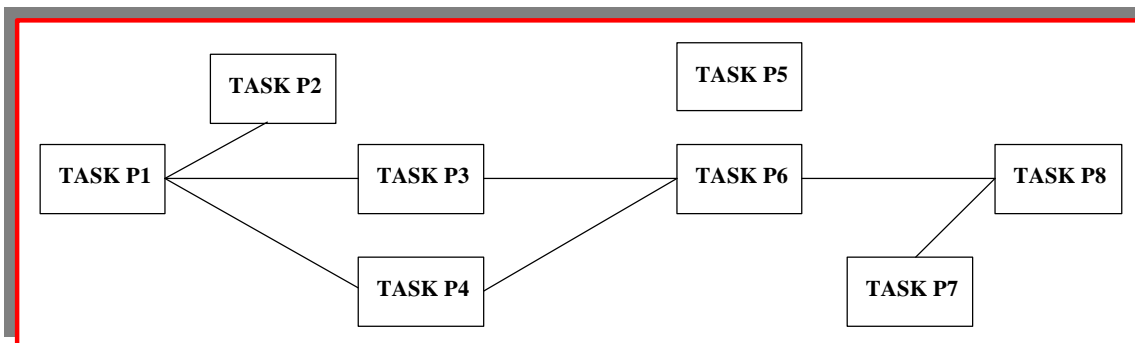
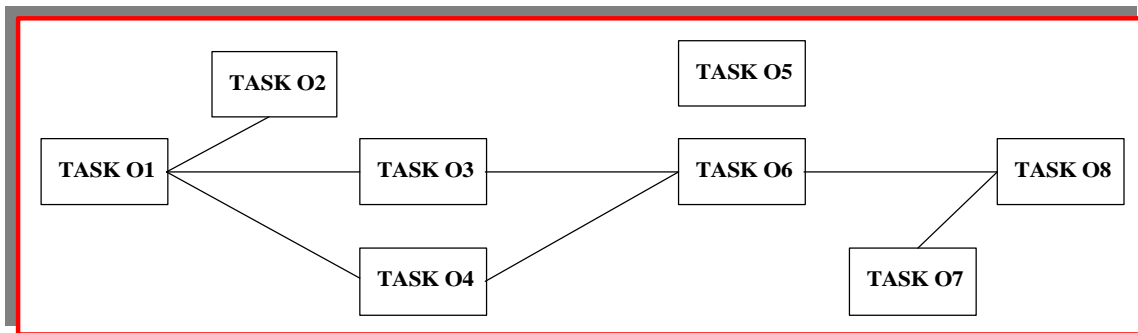


Figure T-3. Planning Task Flow Chart



- ★ **Specify** the following for each functional operation area task scenario subparagraph:
  - In “*bold*” face, the assigned task to be performed.
  - Who performs the assigned task (user types, functional area, etc.).
  - What do users do to perform the assigned task (major steps, subtasks, etc.).
  - When do users begin/conclude the assigned task (input event, output event, etc.).
  - Where do users perform the assigned task (location, managerial level, etc.).
  - Why do users require an AIS to perform the assigned task effectively.
  - How often do users perform the assigned task (frequency, workload, etc.).
  - Effectiveness (task success rate) threshold and objective requirements.
  - Performance (information value attributes) threshold and objective requirements.
  - Associated rationale for quantified thresholds and objectives metrics.
  - The AIS acquisition increment(s) whose capabilities address the assigned task.
- (b) **Organizing Task Scenarios.** Organizing task scenarios pertain to those assigned tasks that are concerned with grouping activities to be performed as well as establishing organizational forms and relationships to meet mission needs. The following organizing tasks address the COI: “*Do AIS capabilities support organization decision makers at operational locations to organize the mission.*” The “*organizing the mission*” assigned tasks associated with this COI address the required functional users and their assigned tasks to organize for the use of their forces and resources to support the operational objectives of the organization. Its organizing task MOPs cover information value. Users specify whether organizing tasks warrant a COI. Address the following information in this paragraph, replacing terms underlined with system terminology.
  - ★ **State the following:** “*Figure T-4 diagrams the organizing managerial tasks both sequentially and concurrently. The following subparagraphs address the organizing task scenarios required to answer the COI: Do AIS capabilities support organization decision makers at operating locations to organize the mission.*”
  - ★ **Diagram** sequentially and concurrently in a PERT flow chart those organizing managerial tasks that the AIS will support.



**Figure T-4. Organizing Task Flow Chart**

- ★ **Specify** the following for each functional operation area task scenario subparagraph:
  - In “*bold*” face, the assigned task to be performed.
  - Who performs the assigned task (user types, functional area, etc.).
  - What do users do to perform the assigned task (major steps, subtasks, etc.).
  - When do users begin/conclude the assigned task (input event, output event, etc.).
  - Where do users perform the assigned task (location, managerial level, etc.).

Why do users require an AIS to perform the assigned task effectively.  
 How often do users perform the assigned task (frequency, workload, etc.).  
 Effectiveness (task success rate) threshold and objective requirements.  
 Performance (information value attributes) threshold and objective requirements.  
 Associated rationale for quantified thresholds and objectives metrics.  
 The AIS acquisition increment(s) whose capabilities address the assigned task.

- (c) **Directing Task Scenarios.** Directing task scenarios pertain to those assigned tasks that are concerned with leading, guiding, and motivating people in the organization through information facilitation and flow of knowledge to achieve mission needs. The directing task scenarios address the principle COI: “*Do AIS capabilities support organization decision makers at operational locations to direct the mission.*” The “directing the mission” assigned tasks associated with this COI address the required functional users and their assigned tasks to direct the use of their forces and resources to support the operational objectives of the organization. The directing task MOPs cover information value. Users specify whether directing tasks warrant a COI. Address the following information in this paragraph, replacing terms underlined with system terminology.

- ✧ **State the following:** “Figure T-5 diagrams the directing managerial tasks both sequentially and concurrently. The following subparagraphs address the directing task scenarios required to answer the COI: *Do AIS capabilities support organization decision makers at operating locations to direct the mission.*”
- ✧ **Diagram** sequentially and concurrently in a PERT flow chart those directing managerial tasks that the AIS will support.

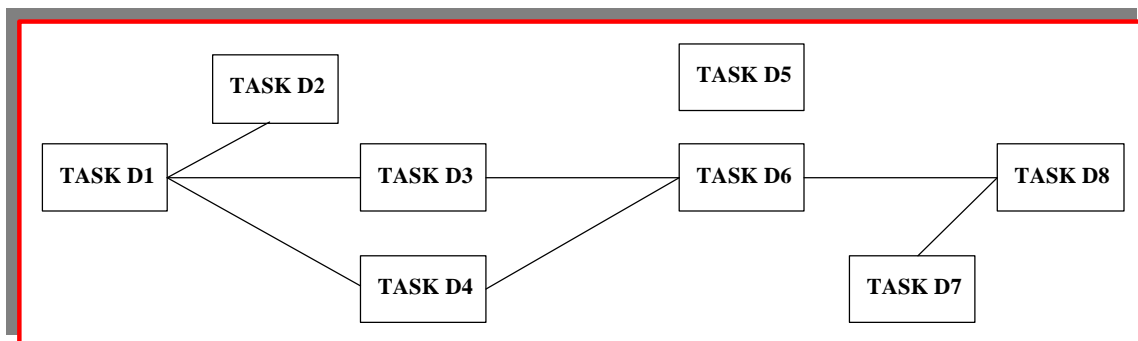


Figure T-5. Directing Task Flow Chart

- ✧ **Specify** the following for each functional operation area task scenario subparagraph:  
 In “*bold*” face, the assigned task to be performed.  
 Who performs the assigned task (user types, functional area, etc.).  
 What do users do to perform the assigned task (major steps, subtasks, etc.).  
 When do users begin/conclude the assigned task (input event, output event, etc.).  
 Where do users perform the assigned task (location, managerial level, etc.).  
 Why do users require an AIS to perform the assigned task effectively.  
 How often do users perform the assigned task (frequency, workload, etc.).  
 Effectiveness (task success rate) threshold and objective requirements.  
 Performance (information value attributes) threshold and objective requirements.  
 Associated rationale for quantified thresholds and objectives metrics.  
 The AIS acquisition increment(s) whose capabilities address the assigned task.

- (d) **Controlling Task Scenarios.** Controlling task scenarios pertain to those assigned tasks that are concerned with monitoring, measuring, and modifying (when necessary) policy, procedures, and programs to meet mission needs. The following controlling tasks address the COI: “Do AIS capabilities support organization decision makers at operational locations to organize the mission.” The “controlling the mission” assigned tasks associated with this COI address the required functional users and their assigned tasks to control the use of their forces and resources to support the operational objectives of the organization. Its controlling task MOPs cover information value. Users specify whether controlling tasks warrant a COI. Address the following information in this paragraph, replacing terms underlined with system terminology.

- ✧ **State the following:** “Figure T-6 diagrams the controlling managerial tasks both sequentially and concurrently. The following subparagraphs address the controlling task scenarios required to answer the COI: Do AIS capabilities support organization decision makers at operating locations to control the mission.”
- ✧ **Diagram** sequentially and concurrently in a PERT flow chart those controlling managerial tasks that the AIS will support.

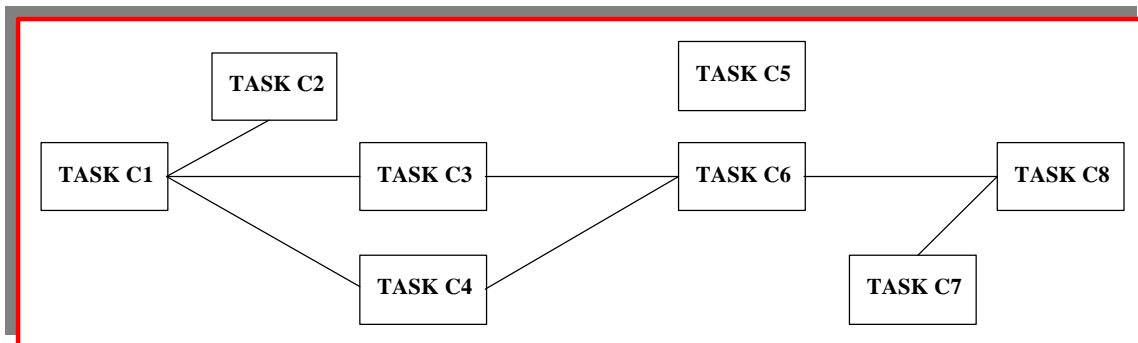


Figure T-6. Controlling Task Flow Chart

- ✧ **Specify** the following for each functional operation area task scenario subparagraph:
  - In “*bold*” face, the assigned task to be performed.
  - Who performs the assigned task (user types, functional area, etc.).
  - What do users do to perform the assigned task (major steps, subtasks, etc.).
  - When do users begin/conclude the assigned task (input event, output event, etc.).
  - Where do users perform the assigned task (location, managerial level, etc.).
  - Why do users require an AIS to perform the assigned task effectively.
  - How often do users perform the assigned task (frequency, workload, etc.).
  - Effectiveness (task success rate) threshold and objective requirements.
  - Performance (information value attributes) threshold and objective requirements.
  - Associated rationale for quantified thresholds and objectives metrics.
  - The AIS acquisition increment(s) whose capabilities address the assigned task.

- (2) **Effectiveness Metrics — MOEs/MOPs.** For an MIS, the operational task concerns the management of the forces and resources of the organization to support operational objectives. Using an AIS, managers perform assigned tasks (planning, organizing, directing, and controlling) to manage their forces and resources effectively. The MOE evaluation criteria concentrates on the outcomes from executing the operational or assigned tasks. For an MIS, the evaluation criteria rests with the user-defined, assigned tasks effectiveness rates — the probability (percentage) that decision makers (managers) can perform assigned tasks effectively, based on the value of the information provided. After all, if the MIS/AIS provides inferior, untimely, or unusable information, then the user capability to accomplish assigned tasks effectively to meet mission needs diminishes. The performance measures (MOPs) for evaluating assigned task information value address those capabilities (attributes) inherent to quality information. The MOPs required for evaluating assigned task information value include task timeliness as well as information accuracy, currency, completeness, relevancy, and format. These information value attributes represent the plausible AIS causes for ineffective performance of assigned tasks. These information value attributes apply to the effectiveness of any operational or assigned task for MIS. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.

★ **State the following:** *“The operational effectiveness MOEs for the AIS address the information value provided to perform the assigned tasks of the AIS. Information value tasks measures the quality of information provided by the AIS to support organization decision makers at operational locations to achieve the mission. Its evaluation criteria represents the probability that decision makers using the AIS can perform the assigned tasks effectively. The required task effectiveness rate are specified for each assigned task. Effective assigned task performance is based on the following information value characteristics: task timeliness, information accuracy, information currency, information completeness, information relevancy, and information format.”*

- (a) **Task Timeliness.** Task timeliness pertains to the time required to execute assigned tasks effectively. This operational performance characteristic applies to the effectiveness of any assigned task. To operationally quantify task timeliness requirements, AIS users must have specified up front the assigned task(s); the type of information required to perform the assigned task(s); and the amount of time (minimum) required to accomplish the assigned task effectively. Address the following information in this paragraph.

★ **State the following:** *“Task timeliness measures the amount of time required to execute assigned tasks effectively. Evaluation criteria: The task performance time required to enable effective task performance. Task timeliness evaluation criteria thresholds/objectives are denoted for each assigned task either as a specific performance time requirement or as user satisfaction with actual information timeliness, where appropriate.”*

- (b) **Information Accuracy.** Information accuracy pertains to the correctness of information in reflecting reality to execute assigned tasks effectively. This operational performance characteristic applies to the effectiveness of any assigned task. To operationally quantify information accuracy requirements, AIS users must have specified up front the assigned task(s); the information required to perform the assigned task(s); and the degree of information accuracy required to perform the assigned task effectively with regard to correctness and precision. Address the following information in this paragraph.

- ★ **State the following:** *“Information accuracy measures the correctness of information in reflecting reality. Evaluation criteria: The percentage of presented information over a specified time interval deemed correct to enable effective task performance. Information accuracy evaluation criteria thresholds/objectives are denoted for each assigned task, where appropriate.”*
- (c) **Information Currency.** Information currency pertains to the degree to which information is up-to-date to execute assigned tasks effectively. This operational performance characteristic applies to the effectiveness of any assigned task. To operationally quantify information currency requirements, AIS users must have specified up front the assigned task(s); the information required to perform the assigned task(s); and the degree of currency of the information required to accomplish the assigned task effectively with regard to response time and up-to-datedness. Address the following information in this paragraph.

★ **State the following:** *“Information currency measures the degree to which the information is up-to-date. Evaluation criteria: The percentage of presented information over a specified time interval deemed up-to-date or current to enable effective task performance. Information currency evaluation criteria thresholds/objectives are denoted for each assigned task, where appropriate.”*
- (d) **Information Completeness.** Information completeness pertains to the thoroughness of sought information to execute assigned tasks effectively. This operational performance characteristic applies to the effectiveness of any assigned task. To operationally quantify information completeness requirements, AIS users must have specified up front the assigned task(s); the type of information required to perform the assigned task(s); and the degree of completeness (minimum level) required to accomplish the assigned task effectively with regard to level of detail and exhaustiveness of information. Address the following information in this paragraph.

★ **State the following:** *“Information completeness measures the thoroughness of sought information. Evaluation criteria: The percentage of presented information over a specified time interval deemed thorough enough to enable effective task performance. Information completeness evaluation criteria thresholds/objectives are denoted for each assigned task, where appropriate.”*
- (e) **Information Relevancy.** Information relevancy pertains to the essentialness of information provided to the user to execute assigned tasks effectively. This operational performance characteristic applies to the effectiveness of any assigned task. To operationally quantify information relevancy requirements, AIS users must have specified up front the assigned task(s); the type of information required to perform the assigned task(s); and the degree of relevancy (minimum level) required to perform the assigned task effectively with regard to level of redundancy and appropriateness of information. Address the following information in this paragraph.

★ **State the following:** *“Information relevancy measures the essentialness of information provided to the user. Evaluation criteria: The percentage of presented information over a specified time interval deemed germane or essential to enable effective task performance. Information relevancy evaluation criteria thresholds/objectives are denoted for each assigned task, where appropriate.”*
- (f) **Information Format.** Information format pertains to the composition or layout of the information to execute assigned tasks effectively. This operational performance characteristic applies to the effectiveness of any assigned task. Address the following information in this paragraph.

- ☆ **State the following:** “Information format measures the adequacy of information presentation required to support decision makers to execute assigned tasks effectively. Evaluation criteria: The user satisfaction with information format required to enable effective assigned task performance.”
- b. **Logistics and Readiness.** Logistics and readiness pertains to the operational suitability COIs, MOPs, and the thresholds/objectives with regard to suitability task scenarios. The operational suitability COIs are derived from the operational life cycle states of the AIS to support the achievement of mission needs. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
- ☆ **State the following:** “Logistics and readiness addresses the operational suitability critical operational issues (COIs), measures of performance (MOPs), and associated thresholds/objectives for all task scenarios.”
- (1) **Suitability COIs.** Operational suitability is the degree to which a system can be placed satisfactorily in field use with consideration given to availability, compatibility, transportability, interoperability, reliability, wartime usage rates, maintainability, safety, human factors, manpower supportability, logistics supportability, natural environmental effects and impacts, documentation, and training requirements. Within this context, AIS suitability evaluation focuses on the life cycle of a system in its operational environment to support the performance of assigned tasks. As the OT&E test article, the AIS represents a system made up of fixed and possibly deployable nodes providing managers at various locations useful information in a necessary time frame to make decisions. As the tool for management, the AIS must have acceptable logistics support and readiness to support effective management of forces and resources to accomplish the operational tasks of the organization in support of some operational objective and strategy. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
- ☆ **State the following:** “The operational suitability COIs are derived from the operational life cycle states of the AIS for achieving mission needs.”
- (a) **AIS Readiness.** Readiness is the ability of forces, units, systems, or equipment to deliver required timely output with finite deployable resources. AIS readiness involves the availability of AIS nodes (fixed or deployable) to support mission needs. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
- ☆ **State the following:** “Readiness answers the COI: Does AIS readiness support mission requirements in the operational environment? It is addressed by the operational availability, operational dependability, mean time between maintenance (logistics reliability) and maintenance ratio performance measures.”
- (b) **AIS Logistic Support.** Sustainability is the ability of forces, units, systems, or equipment to maintain the necessary level and duration of operational activity to achieve operational objectives. AIS sustainability involves the effective response of both fixed and deployable portions of the system to support mission needs. The effectiveness of achieving sustainable states with an AIS depends largely on system survivability, human supportability, infrastructure supportability, and software. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
- ☆ **State the following:** “Logistics Support answers the COI: Does AIS logistics support sustain mission requirements in the operational environment? It is addressed by the system survivability, human systems supportability, infrastructure supportability, and software supportability performance measures.”



- (2) **Suitability Metrics — Measures of Suitability (MOSs)/MOPs.** For MIS, two types of suitability COIs exist — readiness and logistics supportability. The AIS suitability MOSs for evaluating readiness concern operational availability, operational dependability, and preventative maintenance requirements and for evaluating logistics support concern system survivability, human supportability, infrastructure supportability, and software supportability.
- ✳ **State the following:** *“The AIS suitability MOSs address operational availability (Ao), operational dependability (Do), mean time between maintenance (MTBM), maintenance ratio (MR), system survivability, human systems supportability, infrastructure supportability, and software supportability.”*
  - (a) **Operational Availability (Ao).** This MOS pertains to the probability that a system can be placed in use for any specified assigned task, when required. This MOS answers the question: Does the AIS operational availability furnish operational users with information required to accomplish assigned tasks effectively? Ao includes both the inherent parameters and logistics support effectiveness of the AIS that relate to all time the system might be desired for use. Quantitative evaluation criteria (a ratio between 0 and 1) represents user satisfaction with the operational availability (Ao) of the AIS to support the performance of assigned tasks effectively. Qualitative evaluation criteria defines the inherent reliability parameters, maintainability parameters, and logistics support effectiveness issues that constitute an operational available AIS and associated subsystems. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
    - ✳ **State the following:** *“Ao, where:  $Ao = (MTBDE)/(MTBDE + MDT)$ . Evaluation criteria: percentage that the AIS Ao enables effective performance of the assigned tasks.”*
    - ✳ **Define** the inherent reliability parameters, maintainability parameters, and logistics support effectiveness issues that constitute an operationally available AIS and associated subsystems.
    - ✳ **Define** the type of operational mission failures, preventive maintenance, training, maintenance and supply response, and actual on-equipment repairs that constitute downing events for the AIS and associated subsystems.
    - ✳ **Define** the type of system repair time, administrative delays, and logistics delays that constitute downing time for the AIS and associated subsystems.
  - 1. **Mean Time Between Downing Events (MTBDE).** This MOP pertains to the average time between events which bring the system down. This MOP furnishes information required to calculate operational availability. MTBDE includes operational mission failures, preventative maintenance, training, maintenance and supply response, administrative delays, and actual on-equipment repair. Quantifiable objective evaluation criteria (average in hours) represents user satisfaction with the MTBDE of the AIS to support the performance of assigned tasks effectively. Quantifiable subjective evaluation criteria defines the type of operational mission failures, preventative maintenance, training, maintenance and supply responses, administrative delays, and actual on-equipment repair events that constitute downing events for the AIS and associated subsystems. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
    - ✳ **State, if appropriate, the following:** *“Mean Time Between Downing Events (MTBDE), where:  $MTBDE = (Number\ of\ operating\ hours)/(Number\ of\ downing\ events)$ . Evaluation criteria: MTBDE that the AIS enables effective performance of the assigned tasks.”*

2. **Mean Downtime (MDT).** This MOP pertains to the average elapsed time, as the result of a downing event, required to repair and restore the system to full operating status. This MOP furnishes information required to calculate operational availability. MDT results from system repairs, administrative delays, and logistics delays. Quantifiable objective evaluation criteria (average in hours) represents user satisfaction with the MDT of the AIS to support the performance of assigned tasks effectively. Quantifiable subjective evaluation criteria defines the type of system repairs, administrative delays, and logistics delays that constitute downing events for the AIS and associated subsystems. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
  - ★ **State, if appropriate, the following:** “*Mean Down Time (MDT), where:  $MDT = (Total\ down\ time\ in\ hours)/(Number\ of\ downing\ events)$ . Evaluation criteria: MDT that the AIS enables effective performance of the assigned tasks.*”
- (b) **Operational Dependability (Do).** This MOS pertains to the probability that a system can be continuously used to execute a specific assigned task. This MOS answers the question: Does the AIS dependability furnish users with information required to accomplish assigned tasks effectively? Do includes both the inherent reliability parameters, maintainability parameters, and logistics support effectiveness of the AIS that relate to all time the system might be desired for use. Quantifiable objective evaluation criteria (a ratio between 0 and 1) represents user satisfaction with the operational dependability of the AIS to support the performance of assigned tasks effectively. Quantifiable subjective evaluation criteria defines inherent reliability parameters, maintainability parameters, and logistics support effectiveness that constitute the type of downing events for the AIS and associated subsystems. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
  - ★ **State the following:** “*Operational Dependability (Do), where:  $Do = (MTBOMF)/(MTBOMF + MCMTOMF)$ . Evaluation criteria: percentage that the AIS Do enables effective performance of the assigned tasks.*”
  - ★ **Define** the inherent reliability parameters, maintainability parameters, and logistics support effectiveness issues that constitute an operationally dependable AIS and associated subsystems.
  - ★ **Define** the type of inherent hardware, software and firmware failures, induced user and maintainer failures, and could not duplicate failures that constitute operational mission failures for the AIS and associated subsystems.
  - ★ **Define** the type of system repair time that constitute corrective maintenance time for the AIS and associated subsystems.
1. **Mean Time Between Operational Mission failures (MTBOMF).** This MOP pertains to the average time between failures or unacceptable degradation of essential system functions. This MOP furnishes information required to calculate dependability. Operational mission failures do not necessarily occur during a mission; they merely must or could have mission impact. Quantifiable objective evaluation criteria (average in hours) represents user satisfaction with the MTBOMF of the AIS to support the performance of assigned tasks effectively. Quantifiable subjective evaluation criteria defines the type of operational mission failures that constitute downing events for the AIS and associated subsystems. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.



1. **State, if appropriate, the following:** “Mean Time Between Operational Mission Failures (MTBOMF), where:  $MTBOMF = (\text{Number of operating hours})/(\text{Number of operational mission failures})$ . Evaluation criteria: MTBOMF that the AIS enables effective performance of the assigned tasks.”
2. **Mean Corrective Maintenance Time for Operational Mission Failures (MCMTOMF).** This MOP pertains to the average total elapsed time, as the result of a critical failure, required to repair and restore a system to full operating status. This MOP furnishes information required to calculate operational dependability. Quantifiable objective evaluation criteria (average in hours) represents user satisfaction with the MCMTOMF of the AIS to support the performance of assigned tasks effectively. Quantifiable subjective evaluation criteria defines the type of operational mission failures that constitute corrective maintenance time for the AIS and associated subsystems. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
- ☆ **State, if appropriate, the following:** “Mean Corrective Maintenance Time for Operational Mission Failures (MCMTOMF), where:  $MCMTOMF = (\text{Total corrective maintenance time for operational mission failures})/(\text{Number of operational mission failures})$ . Evaluation criteria: MCMTOMF that the AIS enables effective performance of the assigned tasks.”
- (c) **Mean Time Between Maintenance (MTBM) MOS.** This MOS pertains to logistics reliability, the average elapsed time between on-equipment maintenance events consisting of corrective maintenance actions (inherent, induced, and no-defect), and preventive maintenance actions. This MOS answers the question: Does the AIS maintenance assure that users can accomplish assigned tasks effectively? Quantifiable objective evaluation criteria (average time in hours) represents user satisfaction with the time required for maintenance of the AIS to support the performance of assigned tasks effectively. Quantifiable subjective evaluation criteria defines the type of maintenance required for the AIS and associated subsystems. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
- ☆ **State, if appropriate, the following:** “Mean Time Between Maintenance (MTBM), where:  $MTBM = (\text{Total operating time})/(\text{Total number of maintenance events})$ . Evaluation criteria: MTBM that the AIS enables effective performance of the assigned tasks.”
- ☆ **Define** the type of test preparations, troubleshooting, remove and replacement of components, repairs, adjustments, and functional checks that constitute unscheduled maintenance events for the AIS and associated subsystems.
- ☆ **Define** the type of inspections, detections, or corrections on incipient failures before they occur or before they develop into major defects that constitute scheduled maintenance events for the AIS and associated subsystems.
1. **Mean Time Between Unscheduled Maintenance (MTBUM) MOP.** This MOP pertains to the average elapsed time between on-equipment, corrective maintenance actions (inherent, induced, and no-defect). This MOP answers the question: Does the AIS corrective maintenance assure that users can accomplish assigned tasks effectively? Quantifiable objective evaluation criteria (average time between unscheduled maintenance) represents user satisfaction with the time required for corrective maintenance of the AIS to support the performance of assigned tasks effectively. Quantifiable subjective evaluation criteria defines the type of corrective maintenance required for the AIS and associated subsystems. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.

- ★ **State, if appropriate, the following:** “*Mean time between unscheduled maintenance (MTBUM), where:  $MTBUM = (\text{Total operating time}) / (\text{Number of corrective maintenance events})$ . Evaluation criteria: MTBUM that the AIS enables effective performance of the assigned tasks.*”
2. **Mean Time Between Scheduled Maintenance (MTBSM) MOP.** This MOP pertains to the average elapsed time between the performance of scheduled or preventive or scheduled maintenance events. This MOP answers the question: Does the AIS scheduled maintenance assure that users can accomplish assigned tasks effectively? Quantifiable objective evaluation criteria (average time between scheduled maintenance) represents user satisfaction with the time required for preventative maintenance of the AIS to support the performance of assigned tasks effectively. Quantifiable subjective evaluation criteria defines the type of maintenance deemed preventive or unscheduled for the AIS and associated subsystems. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
- ★ **State, if appropriate, the following:** “*Mean time between scheduled maintenance (MTBPM), where:  $MTBPM = (\text{Total operating time}) / (\text{Number of preventative maintenance events})$ . Evaluation criteria: MTBPM that the AIS enables effective performance of the assigned tasks.*”
- (d) **Maintenance Ratio (MR) MOPs.** This MOS pertains to the average maintenance work-hours expended over the operational life of the system, covering corrective maintenance actions (inherent, induced, and no-defect), and preventative maintenance actions. This MOS answers the question: Does the AIS maintenance assure that users can accomplish assigned tasks effectively? Quantifiable objective evaluation criteria denoting (the ratio or percentage of time the system requires maintenance) represents user satisfaction with the time required for maintenance of the AIS to support the performance of assigned tasks effectively. Quantifiable subjective evaluation criteria defines the type of maintenance (corrective and preventive) required for the AIS and associated subsystems. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
- ★ **State, if appropriate, the following:** “*Maintenance Ratio (MR), where:  $MR = (\text{Total corrective and preventative maintenance hours expended}) / (\text{Total system possessed time})$ . Evaluation criteria: MR that the AIS enables effective performance of the assigned tasks.*”
  - ★ **Define** the type of test preparations, troubleshooting, remove and replacement of components, repairs, adjustments, and functional checks that constitute unscheduled maintenance events and time for the AIS and associated subsystems.
  - ★ **Define** the type of inspections, detections, or corrections on incipient failures before they occur or before they develop into major defects that constitute scheduled maintenance events and time for the AIS and associated subsystems.

1. **Mean Corrective Maintenance Time (MCMT) MOP.** This MOP pertains to the average elapsed time to correct malfunctions, including preparation for test, troubleshooting, removal and replacement of components, repair, adjustment, functional checks, et cetera. This MOP answers the question: Does the AIS corrective maintenance assure that users can accomplish assigned tasks effectively? Quantifiable objective evaluation criteria (average corrective maintenance time) represents user satisfaction with the time required for corrective maintenance of the AIS to support the performance of assigned tasks effectively. Quantifiable subjective evaluation criteria defines the type of corrective maintenance required for the AIS and associated subsystems. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
    - ★ **State, if appropriate, the following:** “*Mean corrective maintenance time (MCMT), where:  $MCMT = (Total\ down\ time\ for\ corrective\ maintenance) / (Number\ of\ corrective\ maintenance\ events)$ . Evaluation criteria: MCMT that the AIS enables effective performance of the assigned tasks.*”
  2. **Mean Preventive Maintenance Time (MPMT) MOP.** This MOP pertains to the average elapsed time to prevent malfunctions, including inspections, detections, or corrections of incipient failures either before they occur or before they develop into major defects such as adjustments. This MOP answers the question: Does the AIS preventive maintenance assure that users can accomplish assigned tasks effectively? Quantifiable objective evaluation criteria (average preventive maintenance time) represents user satisfaction with the time required for preventative maintenance of the AIS to support the performance of assigned tasks effectively. Quantifiable subjective evaluation criteria defines the type of maintenance deemed preventive or unscheduled for the AIS and associated subsystems. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
    - ★ **State, if appropriate, the following:** “*Mean preventive maintenance time (MPMT), where:  $MPMT = (Total\ down\ time\ for\ preventive\ maintenance) / (Number\ of\ corrective\ maintenance\ events)$ . Evaluation criteria: MPMT that the AIS enables effective performance of the assigned tasks.*”
- (e) **System Survivability MOS.** System survivability MOS for an AIS address the administrative and physical controls, communication controls, data integrity, and post-processing controls capabilities of the AIS to support mission requirements. This MOS and associated MOPs, thresholds, and objectives apply to all tasks unless otherwise noted. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
- ★ **State the following:** “*This MOS measures the adequacy of administrative and physical controls, communication controls, data integrity, and post-processing controls capabilities of the AIS to support mission requirements. Its evaluation criteria represents the aggregate of such characteristics as administrative and physical controls, communication controls, data integrity, and post-processing controls.*”
1. **Administrative and Physical Controls.** Administrative and physical controls adequacy pertains to the protection of data processing operations required to perform assigned tasks effectively, and covers the use of guards, locks, badges, and software access controls such as passwords and lockwords. This system survivability characteristic applies to the suitability of any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology:

1. **State the following:** *“Administrative and physical controls measures the protection of data processing operations to meet mission needs. Evaluation criteria: User satisfaction of planned administrative and physical controls, based on requirements described in paragraph 6.e that address the AIS threat delineated in paragraphs 2, 2.a, and 2.b.”*
2. **Communication Controls.** Communication controls adequacy pertains to complete data transmission and receipt by authorized personnel, terminal, or computer recipients required to perform assigned tasks effectively and covers the secure use of terminals, networks, and connections. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology:
  - ★ **State the following:** *“Communication controls measures complete data transmission and receipt by authorized personnel, terminal, or computer recipients to meet mission needs. Evaluation criteria: User satisfaction of planned communication controls, based on requirements described in paragraph 6.e that address the AIS threat delineated in paragraphs 2, 2.a, and 2.b.”*
3. **Data Integrity.** Data integrity adequacy pertains to the successful processing of data required to perform assigned tasks effectively, and covers the prevention of security violations that inhibit effective data processing. This system survivability characteristic applies to the suitability of any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology:
  - ★ **State the following:** *“Data integrity measures to the successful processing of data to meet mission needs. Evaluation criteria: User satisfaction of planned data integrity, based on requirements described in paragraph 6.e that address the AIS threat delineated in paragraphs 2, 2.a, and 2.b.”*
4. **Post-processing Controls.** Post-processing controls adequacy pertains to determining (a) all transactions are processed once and only once, (b) transactions and processing were complete, accurate, and authorized, (c) distribution of processing results was made to only authorized recipients, (d) data and the required use of system resources were recoverable, and (e) there is an ability to detect and isolate violations required to perform assigned tasks effectively. Post-processing controls covers the validation of compliance with predetermined systems requirements through post-operations analysis of input, processing, and output information. This system survivability characteristic applies to the suitability of any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology:
  - ★ **State the following:** *“Post-processing controls measures the authorization of transaction, processing, and recovery methods to meet mission needs. Evaluation criteria: User satisfaction of planned Post-processing controls, based on requirements described in paragraph 6.e that address the AIS threat delineated in paragraphs 2, 2.a, and 2.b.”*
- (f) **Human Supportability.** The human supportability for an AIS address the adequacy of manpower and personnel support, training and training support, technical data, human factors engineering, and safety and health hazard capabilities of the AIS to support mission requirements. This MOS and associated MOPs, thresholds, and objectives apply to all tasks unless otherwise noted. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.

- ★ **State the following:** *“This MOS measures the adequacy of manpower and personnel support, training and training support, technical data, human factors engineering, and safety and health hazard capabilities of the AIS to support mission requirements. Its evaluation criteria represents the aggregate of such characteristics as manpower and personnel support, training and training support, technical data, human factors engineering, and safety and health hazard capabilities.”*
1. **Manpower and Personnel Support Adequacy.** Manpower and personnel support adequacy pertains to the utility of operations and maintenance personnel required to execute assigned tasks effectively. This human supportability characteristic applies to the suitability of executing any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
 

★ **State the following:** *“Manpower and personnel support adequacy measures the utility of operations and maintenance personnel required to execute assigned tasks effectively. Evaluation criteria: User satisfaction of planned manpower and personnel support requirements, based on requirements described in paragraph 5.C.(1).”*
  2. **Training and Training Support Adequacy.** Training and training support adequacy pertains to the utility of training and training support required to execute assigned tasks effectively. This human supportability characteristic applies to the suitability of executing any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
 

★ **State the following:** *“Training and training support adequacy measures the utility of planned training and training support required to execute assigned tasks effectively. Evaluation criteria: User satisfaction of planned training and training support requirements, based on requirements described in paragraph 5.C.(2).”*
  3. **Technical Data Adequacy.** Technical data adequacy pertains to the utility of technical data required to execute assigned tasks effectively. This human supportability characteristic applies to the suitability of executing any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
 

★ **State the following:** *“Technical data adequacy measures the utility of planned technical data required to execute assigned tasks effectively. Evaluation criteria: User satisfaction of planned technical data requirements, based on requirements described in paragraph 5.C.(3).”*
  4. **Human Factors Engineering Adequacy.** Human factors engineering adequacy pertains to the utility of implemented human factors engineering required to execute assigned tasks effectively. This human supportability characteristic applies to the suitability of executing any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
 

★ **State the following:** *“Human factors engineering adequacy measures the utility of planned human factors engineering required to execute assigned tasks effectively. Evaluation criteria: User satisfaction of planned human factors engineering requirements, based on requirements described in paragraph 5.C.(4).”*
  5. **Safety and Health Hazard Adequacy.** Safety and health hazard adequacy pertains to the utility of planned safety and health hazard considerations required to execute assigned tasks effectively. This human supportability characteristic applies to the suitability of executing any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.



- ✧ **State the following:** *“Safety and health hazard adequacy measures the utility of planned safety and health hazard conditions required to execute assigned tasks effectively. Evaluation criteria: User satisfaction of planned safety and health hazard condition requirements, based on requirements described in paragraph 5.C.(5).”*
- (g) **Infrastructure Supportability.** This infrastructure supportability MOP for an AIS address the adequacy of transportation and basing, facility support, supply support, support equipment, and software support capabilities of the AIS to support mission requirements. This MOS and associated MOPs, thresholds, and objectives apply to all tasks unless otherwise noted. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
- ✧ **State the following:** *“This MOS measures the adequacy of transportation and basing, facility support, supply support, support equipment, and software support capabilities of the AIS to support mission requirements. Its evaluation criteria represents the aggregate of such characteristics as transportation and basing, facility support, supply support, support equipment, and software support capabilities.”*
1. **Transportability and Basing Adequacy.** Transportation and basing adequacy pertains to the utility of planned transportation and basing required to execute assigned tasks effectively. This infrastructure supportability characteristic applies to the suitability of executing any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
 

✧ **State the following:** *“Transportation and basing adequacy measures the utility of planned transportation and basing required to execute assigned tasks effectively. Evaluation criteria: User satisfaction of planned transportation and basing requirements, based on requirements described in paragraph 6.B.”*
  2. **Facility Support Adequacy.** Facility support adequacy pertains to the utility of planned facility support required to execute assigned tasks effectively. This infrastructure supportability characteristic applies to the suitability of executing any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
 

✧ **State the following:** *“Facility support adequacy measures the utility of planned facility support required to execute assigned tasks effectively. Evaluation criteria: User satisfaction of planned facility support requirements, based on requirements described in paragraph 5.E.(2).”*
  3. **Supply Support Adequacy.** Supply support adequacy pertains to the utility of planned supply support required to execute assigned tasks effectively. This infrastructure supportability characteristic applies to the suitability of executing any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
 

✧ **State the following:** *“Supply support adequacy measures the utility of planned supply support required to execute assigned tasks effectively. Evaluation criteria: User satisfaction of planned supply support requirements, based on requirements described in paragraph 5.E.(1)”*
  4. **Support Equipment Adequacy.** Support equipment adequacy pertains to the utility of planned support equipment required to execute assigned tasks effectively. This infrastructure supportability characteristic applies to the suitability of executing any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.

- ✧ **State the following:** *“Support equipment adequacy measures the utility of planned support equipment required to execute assigned tasks effectively. Evaluation criteria: User satisfaction of planned support equipment requirements, based on requirements described in paragraph 5.B.”*
- (h) **Software Supportability.** The software supportability MOS for an AIS address the software maintainability, software maturity, and software support resource capabilities of the AIS to support mission requirements. This MOS and associated MOPs, thresholds, and objectives apply to all tasks unless otherwise noted. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.

✧ **State the following:** *“This MOS measures the adequacy of software maintainability, software maturity, and software resource supportability capabilities of the AIS to support mission requirements. Its evaluation criteria represents the aggregate of such characteristics as software maturity, software maintainability, and software resource supportability capabilities.”*

  1. **Software Maturity Adequacy.** Software maturity pertains to the progress of the software development in its evolution to meet mission needs; and is determined by the adequacy of software change rates, software change implementation rates, software change closure rates, and software change severity. This software support characteristic applies to the suitability of any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.

✧ **State the following:** *“Software maturity measures the progress of the software development in its evolution to meet mission needs. Evaluation criteria: User satisfaction with software maturity rates, based on based on requirements described in paragraph 5.D.(1).”*
  2. **Software Maintainability Adequacy.** Software maintainability pertains to the capability of the software to be maintained by operational users; and is determined by the adequacy of documentation, organization, descriptiveness, and traceability; and the adequacy of software source code modularity, consistency, simplicity, expandability, testability, and traceability. This software support characteristic applies to the suitability of any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.

✧ **State the following:** *“Software maintainability measures the capability of the software to be maintained by operational users. Evaluation criteria: User satisfaction with software maintainability, based on requirements described in paragraph 5.D.(2).”*
  3. **Software Support Resources Adequacy.** Software support resources adequacy pertains to the utility of planned software support required to execute assigned tasks effectively. This software support characteristic applies to the suitability of executing any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.

✧ **State the following:** *“Software support resource adequacy measures the utility of planned software support required to execute assigned tasks effectively. Evaluation criteria: User satisfaction of planned software support resource requirements, based on requirements described in paragraph 5.D.(3).”*

4. **Software Life Cycle Support Adequacy.** Software support resource adequacy pertains to the utility of planned software life cycle support required to execute assigned tasks effectively. This software support characteristic applies to the suitability of executing any assigned task. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.
  - ★ **State the following:** *“Software life cycle support adequacy measures the utility of planned software life cycle support required to execute assigned tasks effectively. Evaluation criteria: User satisfaction of planned software life cycle support requirements, based on requirements described in paragraph 5.D.(4).”*
- c. **Critical System Characteristics.** Critical system characteristics pertain to those design features that determine how well the proposed concept or system will perform in its intended environment. Software engineering is the critical system characteristic for AIS operations. Software engineering pertains to principles of software development intended to reduce development risk and improve development disciplines under the evolutionary, incremental software acquisition process. Address the following information in this paragraph.
  - ★ **Outline** the capability requirements by increments.
  - ★ **Insert** a table to matrix the capabilities of each software incremental development to the assigned tasks described in paragraph 4.a.1 and its subparagraphs.
5. **Integrated Logistics Support.** Integrated logistics support pertains to a disciplined, unified, and iterative approach to the management and technical activities necessary to integrate support considerations into system and equipment design; develop support requirements that are related consistently to readiness objectives, to design, and to each other; acquire the required support; and provide required support during operational phase at minimum cost.
  - a. **Maintenance Planning.** Maintenance planning pertains to the process conducted to evolve and establish maintenance concepts and requirements for the lifetime of the system. Address the following information in this paragraph.
    - ★ **Develop** maintenance concepts using Repair Level Analysis (RLA) trade studies.
    - ★ **Determine** repairable, commercial NDI maintenance strategy.
    - ★ **Describe** the planning approach for contract versus organic repair.
    - ★ **Describe** the software maintenance concept.
  - (1) **Organizational Maintenance Concept.** Organization maintenance concept pertains to the user organization as responsible for performing maintenance on its assigned equipment. Organizational maintenance activities cover inspecting, servicing, lubricating, adjusting, and replacing parts, minor assemblies, and subassemblies. Address the following information in this paragraph.
    - ★ **Identify** the maintenance functional requirements and maintenance concept.
    - ★ **Specify** needed organic and interim contractor support.
    - ★ **Outline** maintenance tasks, support, documentation, and inter-service organic and contractor mix workloads.
  - (2) **Depot Maintenance Concept.** Depot maintenance concept pertains to the organization — DoD or contractor — responsible for supporting lower level maintenance by providing technical assistance and performing that maintenance beyond their responsibility or capability, providing stocks of serviceable equipment, or using more extensive facilities for repair than are available in organizational-level maintenance activities. Depot maintenance activities cover major overhaul or a complete rebuild of parts, assemblies, subassemblies, and end items to include the manufacture of parts, modification, testing, and reclamation as required. Address the following information in this paragraph.



- ✧ **Identify** maintenance functional requirements and maintenance concept.
  - ✧ **Specify** needed organic and interim contractor support.
  - ✧ **Outline** baseline planning approach for contract, organic, inter-service repair mix, and time phasing requirements.
- b. **Support Equipment.** Support equipment pertains to all mobile and fixed equipment required to support system operations and maintenance. Support equipment covers associated multi-use end items; ground handling and maintenance equipment; tools, metrology and calibration equipment; and test equipment. Address the following information in this paragraph.
- ✧ **Identify** needed standard, commercial NDI support equipment.
  - ✧ **Specify** the desired test and fault isolation capabilities for automated test equipment in terms of affordable and realistic probabilities.
  - ✧ **Describe** the depot-level support equipment requirement to support the system throughout the system life cycle.
- c. **Human Systems Integration.** Human systems integration pertains to the consideration of manpower, personnel, training, human factors engineering, safety, and health hazards as factors towards readiness, force structure, affordability, and wartime operational objectives.
- (1) **Manpower and Personnel.** Manpower and personnel pertain to the identification and acquisition of military and civilian personnel with the skills and grades required to operate and support the system over its lifetime at peacetime and wartime rates. Address the following information in this paragraph.
- ✧ **Specify** thresholds and objectives for manpower (authorizations, specialty codes, skill level, high drivers).
  - ✧ **Specify** thresholds and objectives for personnel (aptitudes, knowledge, skills, specialty code structure, high drivers) requirements.
- (2) **Training and Training Support.** Training and training support pertains to the processes, procedures, techniques, training devices, and equipment used to train civilian and active duty and reserve military personnel to operate and support the system. Training curriculum covers initial as well as continuation training for individuals and crews; new equipment training; initial, formal, and on-the-job training; and logistics support planning for training equipment and training device acquisitions and installations. Address the following information in this paragraph.
- ✧ **Specify** thresholds and objectives for training (methods, training system concept, high drivers) requirements.
  - ✧ **Identify** operations and maintenance training concepts.
  - ✧ **Describe** depot training requirements for maintenance, engineering, and software support personnel.
  - ✧ **Do not document** specific equipment to be purchased.
- (3) **Technical Data.** Technical data pertains to scientific or technical information recorded in any form or medium (e.g., hard copy, CD-ROM and video tapes) such as manuals, drawings, and documentation of computer programs or related software. Address the following information in this paragraph.
- ✧ **Specify** user-unique requirements for technical data (timeliness, validation and verification, user participation, special style and format, update medium and distribution, and technical orders) development.
- (4) **Human Factors Engineering.** Human factors engineering pertain to the development of effective person-machine interfaces and preclude system characteristics that require extensive cognitive, physical, or sensory skills; require complex manpower or training intensive tasks; or result in frequent or critical errors. Address the following information in this paragraph.

- ★ **Specify** thresholds and objectives for human factors engineering (methodologies, high drivers) requirements.
  - ★ **Highlight** the human performance and human-in-loop issues as outlined in the IMPACTS Program Plan.
  - ★ **Describe** the man-machine interface requirements for the AIS with regard to system operations and system maintenance.
- (5) **Safety and Health Hazards.** Safety and health hazards pertain to the application of scientific and engineering principles towards identifying and reducing hazards associated with system operation and support with the objective of designing the safest possible system consistent with mission requirements and cost-effectiveness. Address the following information in this paragraph.
- ★ **Specify** thresholds and objectives for safety (lessons learned) and health hazards analysis (lessons learned, high drivers) requirements.
- d. **Computer Resources.** Computer resources pertain to the facilities, hardware, system software, software development and support tools, documentation, and people needed to operate and support computer systems. Address the following information in this paragraph.
- ★ **Describe** the computer resource constraint (language, hardware, database, architecture, and interoperability) requirements.
  - ★ **Identify** spare memory, throughput, and computer memory growth requirements.
- (1) **Software Maturity.** Software maturity pertains to the progress of the software development in its evolution to be reliable. Software reliability pertains to the probability that the software will contribute to failure-free system performance for a specified period of time under specific conditions. Address the following information in this paragraph.
- ★ **State** software maturity requirements to include software change rates, software change implementation rates, software change closure rates, and software change severity for pre- and post-delivery of fielded software.
  - ★ **Establish** requirements with regard to patch-free software and number of mission critical problems acceptable before operational use.
- (2) **Software Maintainability.** Software maintainability pertains to those software and computer support resource characteristics that affect the ability of software programmers/analysts to change software. Software changes cover correcting errors, adding system capabilities, deleting features from programs, and modifying software to be compatible with hardware changes. Address the following information in this paragraph.
- ★ **Identify** any automated tool requirements for software maintainability/trouble shooting.
  - ★ **Describe** software documentation requirements for software maintainability.
  - ★ **Describe** software source code requirements for software maintainability.
  - ★ **Describe** software implementation requirements for software maintainability.
  - ★ **Describe** software quality assurance standard requirements with regard to software design, development, and delivery to assure future re-competability of software support for the life of the software.
- (3) **Software Support Resources.** Software support pertains to the utility of planned software support resources to perform assigned tasks effectively. Software support resources covers products, resources, and procedures that facilitate the support activities to establish the operational baselines, to modify and install software, and to meet user requirements. Address the following information in this paragraph.

- ★ **Describe** how products, resources, and procedures facilitate the support activities to establish the software operational baselines.
  - ★ **Describe** how products, resources, and procedures facilitate the support activities to modify and install software changes.
  - ★ **Identify** when the software support agency (SSA) must be functional (initial operational capability (IOC) declaration, full operational capability (FOC) declaration, et cetera) to provide for system updates, configuration control, and management of all computer programs and data.
- (4) **Software Life Cycle Support.** Software life cycle support pertains to the adequacy of the software life cycle development processes as they affect the supportability of the developed software. Software life cycle support covers project and configuration management, management and technical personnel, support systems, and facilities support activities. Address the following information in this paragraph.
  - ★ **Describe** project and configuration management requirements to support the software life cycle.
  - ★ **Describe** managerial and technical personnel requirements to support the software life cycle.
  - ★ **Describe** support system and facility requirements to support the software life cycle.
- e. **Other Logistics Considerations.** Other logistics support pertains to supplies, facilities, and land.
  - (1) **Supply Support.** Supply support pertains to all management actions, procedures, and techniques used to determine requirements to acquire, catalog, receive, store, transfer, issue, and dispose of secondary items. Supply support covers provisions for initial and replenishment supply support, and sustained logistics acquisition support for support and test equipment. Address the following information in this paragraph.
    - ★ **Identify** the contractual approach for provisioning initial supply support to support mission readiness.
    - ★ **Describe** the contractual and commercial-style inventory control management approach for acquiring, distributing, and replenishing inventory spares and repair parts to support mission sustainment.
    - ★ **Establish** the post production support (PPS) analysis requirement.
  - (2) **Facilities and Land.** facilities and land pertain to the permanent, semi-permanent, or temporary real property assets required to support the system, including conducting studies to define facilities or facility improvements, locations, space needs, utilities, environmental requirements, real estate requirements, and equipment. Address the following information in this paragraph.
    - ★ **Specify** facility and shelter requirements that are external and additional to the procured AIS.
    - ★ **Describe** facility-unique (e.g., hardening, electromagnetic pulse (EMP) protection, environmental effects, power sources, and life cycle cost) requirements.
    - ★ **Emphasize** environmental protection procedures.
- 6. **Infrastructure Support and Interoperability.** Infrastructure support and interoperability pertain to the compatibility of new system designs with the infrastructure that will support them, the identified unique infrastructure requirements to support the system, and the proper planning required to put the infrastructure support into place.
  - a. **Command, Control, Communications, and Intelligence (C3I).** C3I pertains to AIS-unique intelligence information requirements as well as AIS integration into the C3I architecture forecast to exist at the time the AIS is fielded. Address the following information in this paragraph.

- ★ **Describe** the C3I constraints that may impact the mission needs.
- ★ **Define** the desired C3I capability in the operational environment.
- b. **Transportation and Basing.** Transportation and basing pertains to AIS deployability to/within theater as well as required basing and associated facility infrastructures. Address the following information in this paragraph.
  - ★ **Describe** the transportation and basing constraints that may impact satisfying the mission needs.
  - ★ **Define** the level of desired transportation and basing capability in the operational environment.
  - ★ **Define** for deployable facilities the setup and tear down time, manpower, and environmental conditions thresholds and objectives for field operations.
- c. **Standardization, Interoperability, and Commonality.** Standardization, interoperability, and commonality pertain to the AIS joint use, procedural and technical interface, communications, protocols, and standards requirements to assure AIS interoperability with other Service, joint Service, and Allied systems. Address the following information in this paragraph.
  - ★ **Describe** the standardization, interoperability and commonality constraints that may impact satisfying the mission needs.
  - ★ **Define** the level of desired standards, interoperable, and commonality capability in the operational environment.
- (1) **Standardization and Commonality.** Standardization pertains to the standard application program interfaces (API) for each common operating environment (COE) functional area used for information systems to operate effectively together. Commonality pertains to the common operating environment for information systems to operate effectively together. Address the following information in this paragraph.
  - ★ **Define** the COE.
  - ★ **Describe** the specific architecture for standard API to provide mission applications in the COE.
  - ★ **Describe** the specific architecture for standard API to provide support applications in the COE, to cover such function areas as:
    - Administration Functions** (network administration, system administration, database administration, and security administration).
    - Communication Functions** (message processing, communications, correlation, database management, and Mapping, Charting and Geodesy).
    - Managerial Functions** (database management, file management, executive manager, alerts, and office automation,).
    - Service Functions** (on-line support, multimedia support, data interchange services, network services, and distributed computing services).
- (2) **Interoperability.** Interoperability pertains to the ability of systems, units, or forces to provide services to or accept services from other systems, units, or forces and to use the services exchanged so exchanged to operate effectively together. Address the following information in this paragraph.
  - ★ **Identify** the all systems, units, or forces that the AIS acquisition must maintain interoperability capabilities.
  - ★ **Describe** and correlate each identified AIS interoperability requirement with specific operational and assigned task to meet the mission need.
- d. **Mapping, Charting, and Geodesy (MCG) Support.** MCG pertains to any cartographic materials, digital topographic data, and geodetic data needed for AIS employment. Address the following information in this paragraph.
  - ★ **Describe** the MCG constraints that may impact satisfying the mission needs.
  - ★ **Define** the level of desired MCG capability in the operational environment.

- e. **Environment Support.** Environment support pertains to physical factors, operational locations, electronics, and advanced technologies, as well as behavioral factors, personnel perceptions, emotions, and cultural aspects that the mission of AIS is expected to be performed. For managers, the MIS operational environment (whether automated or manual) concerns a communicative process where data are accumulated, processed, stored, and transmitted to appropriate personnel within the organization for the purpose of making decisions to support organizational objectives and needs. Address the following information in this paragraph.
- ★ **Describe** the impact of the operational environment in which the mission needs are expected to be performed.
  - ★ **Define** the level of desired mission capability in the operational environment.
  - ★ **Describe** the AIS system survivability issues in the operational environment with regard to:
    - Administrative and physical controls.
    - Communication controls.
    - Data integrity.
    - Post-processing controls.
7. **Force Structure.** Force structure pertains to the number of AIS systems, subsystems, spares, and training units required to achieve mission needs. Address the following information in this paragraph.
- ★ **Estimate** the number of AIS systems, subsystems (nodes), spares and training units required.
  - ★ **Identify** the type and number of hardware platforms that will employ the systems and subsystems under development and procured to meet mission needs.
8. **Schedule Considerations.** Schedule considerations pertain to the acquisition milestone timetable for procuring the AIS. Address the following information in this paragraph.
- ★ **Define** the acquisition actions required for the AIS to attain initial operational capability (IOC) and full operational capability (FOC) declaration.
  - ★ **Highlight** the AIS operational capability (number of operational systems, operational and support personnel, facilities, and organization and depot maintenance support elements) necessary to declare IOC and FOC.
  - ★ **Highlight** the level of performance (operational effectiveness and operational suitability key parameters thresholds) necessary to declare IOC and FOC.
  - ★ **Specify** the projected AIS availability time frame objective and the impact of not meeting the window time frame for IOC declaration.
  - ★ **Define** the required action and desired suspense dates (e.g., RAA date, projected trial period dates, required support capability dates) for attaining IOC.

## T.2 Requirements Correlation Matrix

A requirements correlation matrix (RCM) is a three-part summary attachment to the ORD, addressed in three parts: Part 1: The Requirements Correlation Matrix; Part 2: Supporting Rationale for System Characteristics and Capabilities Sheet; and Part 3: Rationale and Needs/Requirements Change Sheet.

**RCM Part 1: The Requirements Correlation Matrix (RCM).** RCM Part 1 pertains to summarizing in matrix form those system capabilities, characteristics, objectives, thresholds, and key parameters germane to the operational effectiveness and operational suitability of the acquired automated information system (AIS). Assigned tasks are the ORD-derived measures of effectiveness (task effectiveness rate) needed for an MIS to accomplish its military objectives, missions, or tasks. System capabilities are ORD-derived measures of performance (such as information accuracy, currency, timeliness, etc.) needed for an AIS to accomplish military objectives, missions, or tasks. System characteristics are ORD-derived design features (weight, size, shape, etc.) needed for a system to accomplish approved military objectives, missions, or tasks. A threshold is a minimum acceptable operational value for a system capability or characteristic below which the utility of the AIS becomes questionable. An objective is an optimal operational value equal to or greater than a corresponding threshold value. Key parameters are capabilities and characteristics so significant that failure to meet their threshold is cause for the concept or system selection to be reevaluated or the program to be reassessed or terminated. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.

★ **State** at the top of the page the following:

### REQUIREMENTS CORRELATION MATRIX

#### PART I AS OF DATE: \_\_\_\_\_."

★ **Construct** the RCM (Tables T-1 and T-2) template.

★ **State** the critical operational issue (COI) — effectiveness or suitability.

★ **Denote** for each operational effectiveness COI the following:

**Specify** in the "*System Capabilities and Characteristics*" column each assigned task associated with the COI, and each information value performance metric associated with the assigned task (reference figure T-2).

**Specify** in the "*Thresholds*" column the minimum acceptable task effectiveness rate for each assigned task, and associated objective criteria for the assigned task information value performance metrics.

**Specify** in the "*Objectives*" column the optimal task effectiveness rate for each assigned task, and associated objective criteria for the assigned task information value performance metrics.

**Place** an "\*", where appropriate, by those assigned tasks and associated information value performance metrics in whose threshold(s) denote key parameters to the AIS operational effectiveness.

★ **Denote** for each operational effectiveness COI the following:

**Specify** in the "*System Capabilities and Characteristics*" column those standard suitability performance metrics (reference figure T-3).

**Specify** in the "*Thresholds*" column the minimum acceptable performance criteria for each suitability performance metric, where appropriate.

**Specify** in the "*Objectives*" column the optimal performance criteria for each suitability performance metric, where appropriate.

**Place** an "\*", where appropriate, by those suitability performance metrics whose threshold(s) denote key parameters to the AIS operational suitability.



PLANNING ASSIGNED TASK ILLUSTRATIONS	
Create training standards and requirements.	Forecast logistics support resource requirements.
Design training documentation and courseware.	Formulate recommended instructional sequences.
Determine aeromedical evacuation needs.	Plan capacity, orders and production requirements.
Develop CBI, CAI, IVD, and CDC training plans.	Project training resource cost estimates.
ORGANIZING ASSIGNED TASK ILLUSTRATIONS	
Allocate training resource availability and reserves.	Maintain time and attendance records.
Categorize aircraft aircrews, parts and equipment.	Organize shop floor assignments.
Classify training instructors, resources, and courses.	Schedule theater and until level airlift missions.
Inventory product requisitions and acquisitions.	Select maintenance crew shifts for wartime surge.
DIRECTING ASSIGNED TASK ILLUSTRATIONS	
Administer CBI, CAI, and IVD training.	Instruct personnel on ground safety procedures.
Communicate airlift mission status to theater CINC.	Lead en route air traffic to recovery destination.
Coordinate resources for generating airlift sorties.	Report budget and general ledger accounts.
Direct inbound and outbound airlift missions.	Train personnel on aerospace ground equipment.
CONTROLLING ASSIGNED TASK ILLUSTRATIONS	
Control cost receipts and expenditures.	Modify scheduled events for airlift missions.
Evaluate student performance.	Monitor launch, en route, and recovery missions.
Inspect inventories stock, parts, and equipment.	Regulate student performance, status, and awards.
Measure training course effectiveness.	Track inbound and outbound air traffic.
<p>NOTE: AIS assigned tasks are performed by “people” using computer systems called AISs. To write an assigned task:</p> <ul style="list-style-type: none"> <li>• <u>Begin</u> by selecting an appropriate task-action verb.</li> <li>• <u>Conclude</u> by operationally stating the task that the personnel must perform to meet mission needs.</li> </ul> <p><b>When writing the assigned task, assume that the assigned task can be performed (though ineffectively) without the use of an AIS.</b></p>	

Table T-1. Illustrations of Assigned Tasks

OPERATIONAL EFFECTIVENESS	ORD I		ORD II		ORD III	
System Capabilities & Characteristics	Thresh-holds	Objec-tives	Thresh-holds	Objec-tives	Thresh-holds	Objec-tives
<b>Critical Operational Issue X.</b>						
1. <u>Task</u> (Effectiveness Rate)	TBD	<u>XX%</u>	<u>XX%</u>	<u>XX%</u>	<u>XX%</u>	<u>XX%</u>
1. Task Timeliness MOP.	TBD	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>
2. Accuracy MOP.	TBD	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>
3. Currency MOP.	TBD	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>
4. Completeness MOP.	TBD	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>
5. Relevancy MOP.	TBD	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>
6. Format MOP.	TBD	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>
2. <u>Task</u> (Effectiveness Rate)	TBD	<u>XX%</u>	<u>XX%</u>	<u>XX%</u>	<u>XX%</u>	<u>XX%</u>
1. Task Timeliness MOP.	TBD	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>
2. Accuracy MOP.	TBD	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>
3. Currency MOP.	TBD	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>
4. Completeness MOP.	TBD	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>
5. Relevancy MOP.	TBD	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>
6. Format MOP.	TBD	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>
:	:	:	:	:	:	:
:	:	:	:	:	:	:

Table T-2. AIS Operational Effectiveness RCM

**RCM Part 2: Supporting Rationale for System Characteristics and Capabilities Sheet.** RCM Part 2 pertains to the reasoning for assigning thresholds values (minimum acceptable operational values) to specific system capabilities and characteristics. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.

★ **State** at the top of the page the following:

## REQUIREMENTS CORRELATION MATRIX

### PART II AS OF DATE: \_\_\_\_\_."

★ **Specify** the following for each system capability/characteristic having designated threshold values. The parameter number (Parameter X) and the associated system capability/characteristic in "bold" type.

The specific studies, analyses, threat assessments, modeling, or other reference sources including military judgment that justify and substantiate each system characteristic threshold.

**RCM Part 3: Rationale and Needs/Requirements Change Sheet.** RCM Part 3 pertains to the reasoning for changes in system characteristics, performance, and supporting parameters. Address the following information in this paragraph, replacing terms underlined with the appropriate system terminology.

★ **State** at the top of the page the following:



**REQUIREMENTS CORRELATION MATRIX****PART III AS OF DATE:\_\_\_\_\_."**

- ★ **Specify** the following for each system capability/characteristic changed in response to changes in needs/requirements.

The parameter number (Parameter X) and the associated system capability/characteristic in “*bold*” type.

The report title, document number, get-well date, and schedule showing the rational for changes in system characteristics, performance, and supporting parameters.

OPERATIONAL SUITABILITY	ORD I		ORD II		ORD III	
System Capabilities & Characteristics	Thresh-holds	Objec-tives	Thresh-holds	Objec-tives	Thresh-holds	Objec-tives
<b>Critical Operational Issue Y.</b> Does AIS readiness support mission requirements in the operational environment?						
1. Operational Availability (Ao).	TBD	XX%	XX%	XX%	XX%	XX%
a. Mean Time Between Downing Events (MTBDE).	TBD	XX	XX	XX	XX	XX
b. Mean Downtime (MDT).	TBD	XX	XX	XX	XX	XX
2. Operational Dependability (Do).	TBD	XX%	XX%	XX%	XX%	XX%
a. Mean Time Between Operational Mission Failures (MTBOMF).	TBD	XX	XX	XX	XX	XX
b. Mean Corrective Maintenance Time for Operational Mission Failures (MCMTOMF).	TBD	XX	XX	XX	XX	XX
3. Mean Time Between Maintenance (MTBM).	TBD	XX%	XX%	XX%	XX%	XX%
a. Mean Time Between Unscheduled Maintenance (MTBUM).	TBD	XX	XX	XX	XX	XX
b. Mean Corrective Between Scheduled Maintenance (MTBSM).	TBD	XX	XX	XX	XX	XX
4. Maintenance Ratio (MR).	TBD	XX%	XX%	XX%	XX%	XX%
a. Mean Corrective Maintenance Time (MCMT).	TBD	XX	XX	XX	XX	XX
b. Mean Preventive Maintenance Time (MPMT).	TBD	XX	XX	XX	XX	XX

Table T-3. AIS Operational Suitability

OPERATIONAL SUITABILITY	ORD I		ORD II		ORD III	
System Capabilities & Characteristics	Thresh-holds	Objec-tives	Thresh-holds	Objec-tives	Thresh-holds	Objec-tives
<b>Critical Operational Issue Z.</b> Does AIS readiness support mission requirements in the operational environment?						
5. Systems Survivability.	TBD	XX%	XX%	XX%	XX%	XX%
a. Administration and Physical Controls.	TBD	XX	XX	XX	XX	XX
b. Communication Controls.	TBD	XX	XX	XX	XX	XX
c. Data Integrity.	TBD	XX	XX	XX	XX	XX
d. Post-processing Controls.	TBD	XX	XX	XX	XX	XX
6. Human Support.	TBD	XX%	XX%	XX%	XX%	XX%
a. Manpower & Personnel support.	TBD	XX	XX	XX	XX	XX
b. Training & Training Support	TBD	XX	XX	XX	XX	XX
c. Technical Data Support.	TBD	XX	XX	XX	XX	XX
d. Human Factors Engineering Support.	TBD	XX	XX	XX	XX	XX
e. Safety & Health Hazard Conditions.	TBD	XX	XX	XX	XX	XX
7. Infrastructure Support.	TBD	XX%	XX%	XX%	XX%	XX%
a. Transportation & Basing Support.	TBD	XX	XX	XX	XX	XX
b. Facilities Support.	TBD	XX	XX	XX	XX	XX
c. Supply Support.	TBD	XX	XX	XX	XX	XX
d. Support Equipment.	TBD	XX	XX	XX	XX	XX
8. Software Support.	TBD	XX%	TBD	XX%	TBD	XX%
a. Maturity.	TBD	XX	TBD	XX	TBD	XX
b. Maintainability.	TBD	XX	TBD	XX	TBD	XX
c. Resource Support.	TBD	XX	TBD	XX	TBD	XX
d. Life Cycle Support.	TBD	XX	TBD	XX	TBD	XX

Table T-3. AIS Operation Suitability RCM (cont.)